

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

Claims 1-10 (Canceled)

11. (Currently amended) A rapid diagnostic test system, comprising:

a single-use module, comprising:

a medium containing a labeling substance that comprises first persistent fluorescent structures that emit light having a first frequency and second persistent fluorescent structures that emit light having a second frequency, wherein each of the first persistent fluorescent structures is attached to a substance capable of binding the first persistent fluorescent structure to a target analyte when a sample containing the target analyte is applied to the medium;

a light source positioned to illuminate a target area and a control area on the medium;

a first photodetector positioned to measure light of the first frequency originating from the target area of the medium; ~~and~~

a second photodetector positioned to measure light of the second frequency originating from the control area, wherein a signal from the second photodetector indicating an intensity above a threshold level indicates that the sample has passed through the target area; and

an external terminal receiving electrical power for the light source, the first photodetector, and the second photodetector; and

a reusable module having a receptacle into which the external terminal of the single-use module can be inserted for providing the electrical power from the reusable module to the single-use module and communicating test signals between the single-use module and the reusable module.

12. (Currently amended) The system of claim [[38]] 11, wherein the reusable module implements a user interface capable of indicating a test result.

Claims 13-20 (Canceled)

21. (Previously presented) The system of claim 12, wherein the user interface comprises a display for the test result.

22. (Currently amended) The system of claim [[38]] 11, wherein the test signals are electrical test signals.

23. (Currently amended) The system of claim 11, wherein the first and the second persistent fluorescent structures comprise quantum dots.

24. (Canceled)

25. (Canceled)

26. (Currently amended) The system of claim 11, wherein the medium comprises a lateral-flow strip for performing a binding assay, and the target area contains an immobilized substance that binds to and holds a complex including one of the first persistent fluorescent structures and the target analyte.

Claims 27-36 (Canceled)

Claims 37 and 38 (Canceled).

39. (Currently amended) The system of claim 26, wherein the second persistent fluorescent structures bind to the control ~~strip~~ area.

40. (Previously presented) The system of claim 11, further comprising:

a first color filter that transmit light of the first frequency to the first photodetector and blocks other frequencies; and

a second color filter that transmit light of the second frequency to the second photodetector and blocks other frequencies.

41. (New) The system of claim 11, wherein the control area contains an immobilized substance that binds and retains to the labeling substance.